Utility Co. #	Conflict #	Seg. #
BH	1006	
Station	Lt./Rt.	Sheet #

ILEX BRIDGE DESIGN/BUILD
PRELIMINARY UTILITY INFORMATION SHEET
Utility Company Black Hills Energy
General Location Lighting on Mesa St.

Design Consultant

1. Utility Type: ___ Wire/Cable ___ Gas ✓ Electric ___ Water ___ Other ___
2. Potholed ? ___ Yes ✓ No; Or Field located and surveyed? Yes ___ No ✓
3. Location: Station: 1+ to Station: 4+. Distance from CL ___ RT/LT
   Using Stations as on attached plan sheet.
4. Description of Utility: Size___ Encased Y/N___ Height: ___ Width:___ Clearance:___ Depth:___
5. This Utility will be: ___ Left alone ✓ Disturbed___ Removed___ Replaced___ Relocated___
   Explanation: new poles maybe required - may place electric in conduit in new curb.
6. This Utility may be relocated to: new curb on outside of sidewalk.
   or between Station: 1+ and Station 4+ -Distance from CL:___ Rt./Lt.___
7. Other proposed action: ___

___ Information "A" attached

Section Completed by: Chuck Seip Date: 4-16-13

Utility Company ___ Owner: ___

1. This facility is planned to be: ___left alone ___removed ___replaced ___relocated ___upgraded
   Station: ___ to Station: ___ Distance from CL: ___ Rt./Lt.___
2. Utility in CDOT (Public) ROW by: ___ Permit ___Easement ___License Agreement ___Not in ROW
3. Who is to do the design? ___Utility Company ___Design/Build Contractor
4. Who is to do construction/relocation? ___Utility Company ___Design/Build Contractor
5. Inspection required by Utility Company? ___Yes ___ No
6. Number of days required for notification prior to beginning construction: ___ days
7. Estimated number of days required to complete construction: ___ days
8. Utility can only be disconnected for: ___ days/hours
9. Are there any Construction details that are unique to this location? ___ No ___Yes, describe

___ Information "B" attached

10. Est. Conceptual cost for: Design $___ + Construction $___ = Total $___
11. Estimated conceptual cost (including betterment's) to be paid by the utility company: $___

Section completed by: ___ Date: ___

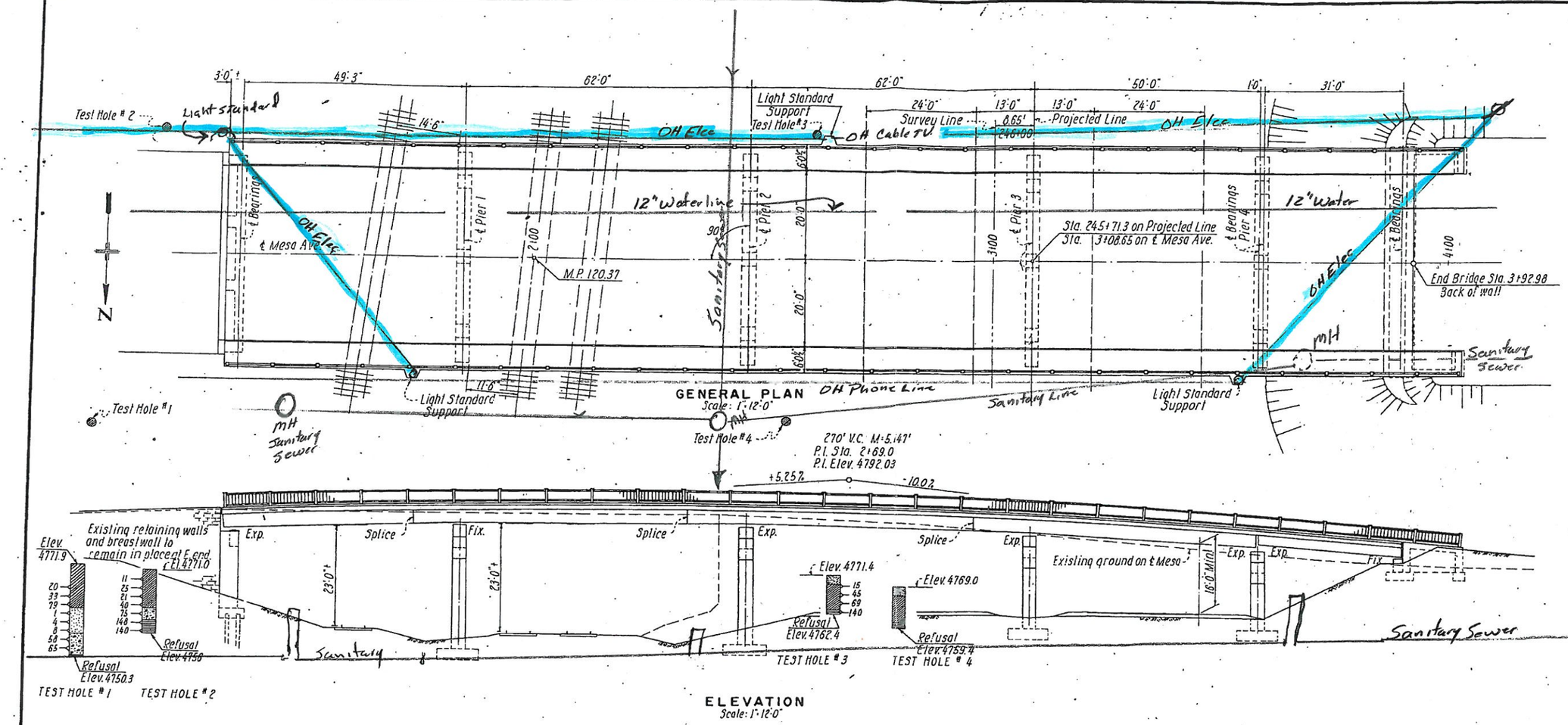
FINAL DECISION: ___left alone ___ removed ___ replaced ___ relocated ___ upgraded ___ other
Explain: ___

___ Information on back ___ Information "C" attached

Routing if Required

ENTITY	RECD. BY	DATE	ENTITY	RECD. BY DATE	DATE
Design Consultant					
CDOT					
Utility Co.					

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	COLO.	I002-3(18)		16	



DESIGN SPECIFICATIONS
1953 A.A.S.H.O. with 1953, 1954 and 1955 amendments.
Live Load: H20-S16.
f_c: 1200 p.s.i. n=10.
f_s (reinforcing): 20,000 p.s.i.
f_s (structural): 18,000 p.s.i.
Weight of earth: 120 lbs. per cu. ft.
Equivalent fluid pressure: 30 lbs. per cu. ft.
Max. basic load per pile (concrete in 10¾" O.D. pipe): 35 Tons.
Max. basic soil pressure: 5 Tons per sq. ft.

929
861
84

GENERAL NOTES

All work shall be done according to the Standard Specifications of the Colorado Department of Highways, adopted June 1, 1952.
Soundings and depth of footings shown according to the best available data. If essentially different conditions are encountered the Bridge Engineer will inspect and determine if redesign is necessary.
Footings in rock shall be poured out to rock and not formed.
All concrete shall be Class "A" and air entrained as specified.
Chamfer all exposed corners ¾" except as noted.
All reinforcing shall be intermediate grade deformed bars conforming to A.A.S.H.O. Specifications M31 and M137. (A.S.T.M. Designations A15 and A305).
All reinforcing bars shall be tagged with the structure number and mark.
All dimensions on bar details are out to out.
All hooks and bends in bars shall conform to A.C.I. Standard 315-51.
Main bars shall not be spliced except where specified on Plans.
Clear distance from surface to reinforcing bars: 3" in footings, 2" in walls, 1" in deck slabs and sidewalks unless otherwise shown.
See sheet 20 for notes re structural steel and paint.

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
14 f	Rock Excavation (Str.)	Cu. Yd.	20
14 g	Common Excavation (Str.)	Cu. Yd.	235
16 c	Mechanical Tamping	Hour	33
46 a	Class A Concrete	Cu. Yd.	631.9
47	Reinforcing Steel	Lb.	77,955
48	Structural Steel **	Lb.	292,700
61 a y	Steel Pipe * Piling	Lin. Ft.	120
91 b	Steel Railing	Lin. Ft.	641.3
11 b	Removal of Old Structure		Lump Sum
60 x	Drilling Holes to Facilitate Pile Driving	Lin. Ft.	60

* 10¾" O.D., 3/16" wall thickness.
** Includes 4,000 lbs. for blast plates.
See Sheet 24 for premoulded joint filler.

LEGEND
Ashes
Sand
Sand and Gravel
Sand and Gravel (Boulders)
Sand and Gravel (Cemented)
Shale
Note: Numbers beside borings represent blows per foot of penetration for 2" sampler.

INDEX OF SHEETS

Sheet 16 General Plan and Elevation.
17 East Abutment.
18 West Abutment.
19 Piers.
20 Beam Layout and Details.
21 Expansion Joint and Diaphragms
22 Railings, Bearings and Blast Plate
23 Deck Plan.
24 Deck Sections.

COLORADO DEPARTMENT OF HIGHW.
NORTH-SOUTH FREEWAY PUE
MESA AVENUE UNDERPASS
STRUCTURE NO. L-18-AU
GENERAL PLAN AND ELEVATION
Clifford Johnson JUNE 19
CLIFFORD JOHNSON
CONSULTING ENGINEER
DENVER, COLORADO

BH 1006